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NETAPP UNIVERSITY

# Supporting and Maintaining E-Series Storage Systems

### COURSE DESCRIPTION

Support and Maintain presents the technical aspects of storage system support and maintenance of the E-based external storage systems. The basic objective of this course is to equip participants with the essential concepts associated with the operation and management of the E-based external storage systems within a Storage Area Network (SAN) in order to be able to support and maintain these systems.

Success in the support and maintenance of optimal storage systems requires the ability to rapidly assess a situation, analyze information and determine a timely solution. The course utilizes a decision making methodology known as the OODA loop (Observation, Orientation, Decision, Action).

The course modules present technical concepts that include host-based multipathing, switch zoning, the SCSI Architecture Model, and controller and drive-side architecture. Participants will learn how to analyze and maintain storage systems through lecture, hands-on labs, and customer-related support data exercises.

The modules use a case-study approach. Problem determination exercises provide participants opportunities to analyze and diagnose several storage system solutions.

The lecture will include an in-depth discussion of how an I/O travels from an

application through the SAN components and controllers to the disk drives and how to use the tools available and the support data gathered through the storage manager software to analyze storage system issues on the I/O path.

# **DELIVERY TYPE**

- Instructor-led training (ILT) or
- Virtual Instructor-led training (VILT)

### **DURATION**

3 days

### **AUDIENCE**

This course is intended for individuals, customer support personnel and business partners responsible for the basic operation, maintenance and support of E-based external storage systems.

## **PREREQUISITES**

- Completion of the Installing and Configuring course is required.
- The participant should have experience with using E-based external storage systems within a Storage Area Network and at least six months field exposure with these storage products and technologies in a support function.

### **OBJECTIVES**

By the end of this course, you should be able to:

- Explain how to apply a decision making model to maintain and support a storage system.
- Examine storage system support data.
- Explain the operational and error conditions for managing storage systems.
- List the correct syntax for the command interface and scripts
- Describe the communication of the host and drive side IO path.
- Explain the operational and error conditions for logical configurations
- Examine storage system drive-side architecture.
- List proper procedures for component replacement.
- Describe the procedure for upgrading storage firmware and host software.
- List the steps for migrating data.

# PRICING AND CANCELLATION POLICY

For pricing and cancellation information, see the NetApp University LearningCenter.

**NOTE:** If you are registering for this course with an Authorized Learning Partner, review the partner's pricing and cancellation policy.

